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ABSTRACT

The concept of team teaching and how real estate education might profit from its use are considered. Contents are as follows: (1) an explanation of this concept for organizing instruction, alternative modes for structuring teaming, a discussion of the strengths and weaknesses inherent in a team approach to instruction, and the research that supports its use; (2) a discussion of the events that typically occur in any teaching/learning transaction and applications of team teaching to real estate education; and (3) a paradigm for implementing a team teaching organizational pattern into a real estate education program sponsored by higher education. The following instructional activities by which team teaching can be applied to real estate education are examined: gaining attention, informing the learners of the objective, stimulating recall of prerequisite learned capabilities, presenting the material to be learned, providing learning guidance, eliciting performance, providing feedback, assessing performance, and enhancing retention and transfer. A proposed topical format for an instructor's guide and references are included. (SW)

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**Team Teaching: A New Instructional
Pattern for Real Estate Education**

by

Professor David L. Boggs

and

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**CENTER FOR REAL ESTATE EDUCATION AND RESEARCH
COLLEGE OF ADMINISTRATIVE SCIENCE
THE OHIO STATE UNIVERSITY
COLUMBUS, OHIO**

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INTRODUCTION

Overview

Instructors do not practice their craft for long without coming to realize that teaching behavior is a chain of decision-making events: decisions which include what to teach, how much to cover, in what segments or units, and in what sequence. In addition there is the larger question of how should our program be organized internally? What method or combination of methods will yield the best results? These are all what Muska Mosston (1972) calls pre-impact decisions.

Another set of decisions, called the impact category, is concerned with classroom action or performance. Here the concern is whether or not to adhere to plans made in the pre-impact phase. What adjustments are called for in the light of feedback from learner behavior in the classroom?

Finally, post-impact decisions involve the instructors in reflecting on the effectiveness of what has transpired and how to best evaluate their efforts. Results of this critique are used to revise and/or inform decisions to be made in the future.

Obviously, in the case of decisions about how to organize instruction and what methods to use or how to teach, there is no one "right" or "good" pattern of organization or method of instruction. There are many good examples of each. Most, if not all, of these can be incorporated within a team teaching framework. As Joyce and Weil (1972) point out--when the concept "good" is applied to teaching, it is better to ask "good for what"? and "good for whom"? These are points which we will return to frequently during our discussion of team teaching and its potential in real estate education.

Purposes

The purpose of this monograph is to explore the concept of teaming (team teaching) and how real estate education might profit from its use. Accordingly, we will attempt to provide you with:

1. an explanation of this concept for organizing instruction, alternative modes for structuring teaming, a discussion of the strengths and weaknesses inherent in a team approach to instruction, and the research which supports its use;
2. a discussion of the events which typically occur in any teaching-learning transaction and applications of team teaching to real estate education; and
3. a paradigm for implementing a team teaching organizational pattern into a real estate education program sponsored by higher education.

Assumptions

This discussion of the system of organizing instruction known as team teaching is predicated on certain assumptions. The first of these is that team teaching involves two or more teachers who utilize a wide variety of teaching methods and instructional strategies during their large group and small group instruction periods. In addition to methodological concerns within a team framework there are also administrative, communications, facilities, and fiscal concerns to be addressed.

A second assumption expressed by Williams (1980) is that a teacher's instructional decisions are closely related to his/her beliefs about the purpose of the instruction, about how learning occurs, and about the students. For example, if an instructor feels that the purpose of large group instruction is to present a clear and uniform set of facts about real estate law or principles of appraisal, the method selected will be different from the method used if the lesson is to explore implications for the industry in such trends as the development of national brokerage chains or the rise of consumerism and open housing. Or, an instructor may believe that learning in a small group occurs best, and perhaps only, when the content is structured in small units, from simple to complex. Such a learning experience would be developed differently than if the instructor believes learning occurs by experiencing a situation in its entirety before examining its separate elements. Another instructor may believe that students (regardless of age and experience) need close supervision, cannot work independently, and can be manipulated by appropriate rewards. This belief calls for methods different from those which are used when learners are expected to be self-directed.

A final factor influencing the way instruction is organized and presented is that the teacher must be at peace with the system, be able to cooperate with other team members and to agree upon methods of instruction. In other words, the selection of instructional methods must be compatible with the instruction, the learning environment, and the philosophy of the instructor. Perhaps the teacher is prone to be very task-oriented yet chooses an instructional strategy that is open-ended and which tolerates ambiguity and lack of closure. This combination is likely to produce too great a conflict between instructional method and style of operation. Hence, a potential problem can be averted by careful consideration of teaching style and whether or not it can be modified for use in a teaming arrangement.

Since assumptions about the purposes of instruction and the students greatly influence instructional decisions, a brief discussion of these with reference to real estate education seems warranted. The learning process will be considered in the section on events of instruction.

In the foreword of the instructors' manual for Principles and Practice II, Racster (1980) recounts the shift in focus in real estate education from an emphasis on facts and information, soon to be out-dated, to providing a knowledge base drawn from disciplines related to the practice of real estate but flexible enough to be applied to diverse purposes. Clearly, the real estate industry is undergoing major changes. Its educational program should be theory-

based, equip learners with skills to continue their learning independently, and the industry should provide these training opportunities.

For the most part, students in real estate education programs can be said to have the characteristics of adult learners. That is, they are motivated and goal-oriented. They need not only information but assistance in making sense of it. They will attempt to reconcile new learnings with their prior experiences. They will need help in integrating what they are learning with what was known and believed previously. They want to probe, test, discuss, and quickly apply that which is being learned. They will not appreciate simplistic treatment to complicated issues nor will they tolerate autocratic measures to manage or control the learning environment. One would be hard pressed to find a better example of education that challenges instructors and learners to be creative, adaptable, and flexible in their respective roles than real estate education.

TEAMING

Introduction

Educational changes in technology, science, and society are occurring at an unprecedented rate. With the current geometric progression of knowledge, population mobility, technology, and social change--stability has become a thing of the past and man's inability to cope has created much frustration (Clarke, 1977 and Chamberlin, 1969). Today, education is frequently viewed with a critical eye because society has not been prepared to meet the needs of a changing society (Clarke, 1977).

As Lobb (1964) points out, the battle of quality education has not been won and there is a definite need for the examination of instructional materials and techniques. Clarke (1977) then raises the question--"Who is responsible for creating conditions whereby the changes will become reality?" (p. 16). The problem is that the responsibility rests with each and everyone of us, but traditionally only a few provide the necessary leadership. Clarke (1977) further indicates that these "change agents" leaders must be adventuresome, courageous, knowledgeable, perceptive, and willing to challenge the status quo" (p. 16).

This section of the monograph presents an overview of team teaching, its origin, definition, organizational characteristics, and research background and findings in higher education. During our extensive review of the literature and research studies, we were unable to identify any information relating to team teaching in real estate education.

The American Scene

Team teaching or teaming of teachers was conceived by Francis Keppel and Judson T. Shaplin (Blair and Woodward, 1964, p. v) in the early fifties. Their efforts emerged on the American education scene during the mid-fifties as a result of a few pilot projects which developed into a major educational movement (Shaplin, 1964).

Shaplin (1964) indicates that the movement attracted the attention of several universities across the nation. Their participation aided the development of team teaching while stimulating a high level of professional interest in the concept.

Harvard University's Graduate School of Education, in cooperation with the Lexington, Massachusetts schools, developed the Franklin School Project. As a result of this cooperative effort, Harvard developed a mechanism called SUPRAD (School and University Program for Research and Development) to foster a clinical partnership between the Lexington school system and the University so that team teaching could be tested under favorable conditions (Anderson, 1964). As a result of SUPRAD and the outstanding leadership provided by Robert H. Anderson, Dr. Anderson is now recognized as the "father of team teaching" (Blair and Woodward, 1964, p. v). Now, twenty-five years later according to Rutherford (1979), "the concept continues to flourish" (p. 29).

Description of Teaming

A recent article by Rutherford (1979) indicates many of the teachers that he surveyed had a difficult time in defining the concept of team teaching. To Shaplin (1964) "team teaching is a type of instructional organization, involving teaching personnel and the students assigned to them, in which two or more teachers are given responsibility, working together, for all or a significant part of the instruction of the same group of students" (p. 15). Lobb (1964) describes team teaching as "the direction of learning activities by two or more teachers in committed association" (p. 6).

Davis and Tompkins (1966) describe team teaching as a phenomena in American education which can greatly improve the quality of the instructional program. Although there are as many forms of team teaching as there are teams, team teaching is any form of teaching in which two or more teachers regularly and purposely share responsibilities for planning, presentation, and evaluation of lessons.

Johnson and Hunt (1968) describe team teaching as "the unified, yet diverse, direction of learning activities by a committed coalition of two or more associated, thoughtful and dedicated persons which direct the experiences of a particular group of students" (p. 2). The primary adhesive of this coalition is their dedication to teaching.

Chamberlin (1969) suggests that team teaching is a difficult concept to define, but he describes it as "a method of organizing teachers, children, space, and curriculum which requires several teachers as a group to plan, conduct, and evaluate the educational program for all of the children assigned to them" (pp. 15-16). Rutherford indicates that "team teaching occurs when two or more teachers work together regularly to enhance instruction. Patterns of cooperation can include planning and designing materials or instructional processes, sharing groups of children and/or instruction, or any combination of these activities" (p. 29).

Each of the above descriptions presents an author's perception of team teaching. A majority of the descriptions emphasized these important points:

1. Team teaching is a method of instructional organization where two or more teachers share responsibility.
2. The organization requires a commitment from each of the participating teachers so that a cooperative effort can be established.
3. The cooperative efforts involve planning, developing, designing, managing, and evaluating instruction, program, and student progress.

Why Team Teaching?

Education plays a very important part in fulfilling the needs of our society and its economy as well as advancing our civilization through new developments in science and technology. When properly executed, education can assist everyone in fulfilling their needs. Therefore, education (pre-school through college) must provide opportunities for students to realize fulfillment.

Johnson and Hunt (1968) identified five areas of responsibility that education should assume. They are belonging, understanding, identification, guidance, and responsibility. Belonging requires the education setting to promote a sense of membership for the students. Understanding refers to the school providing opportunities for fostering tolerance or acceptance of the needs of others. Identification indicates that students need appropriate examples to model themselves after. Guidance refers to the school having both the counselors and the teachers providing the necessary assistance for students so that they can direct their potential towards an immediate or future goal. Responsibility refers to the school's ability to provide students with the opportunity to develop individual responsibility.

Nationally, there have been several attempts to change from the . . . classroom concept to some organizational pattern that is more efficient both educationally and economically (Chamberlin, 1969, p. 6). Chamberlin (1969) indicates further that "to capitalize on the most efficient use of teachers in terms of their backgrounds, subject area specialization, and interests--many organizational patterns that would seem to fit under the general name team teaching are being explored" (p. 6). Some of the reasons behind the investigation of team teaching are: (1) the curriculum explosion and the demand for more knowledgeable teachers; (2) demands for better staff utilization, improvements in the quality of education, and the increased need for instructional flexibility and individualization of instruction; (3) the availability of more sophisticated instructional media along with a more diversified student body; and (4) the belief that teachers are more effective when working together as a group and that team teaching is more efficient.

Organizational Patterns

"The keystone in a rationale for team teaching is the belief that the total accomplishment of the group can be greater than the sum of the talents of the

individual teachers" (Lobb, 1964, p. 8). "Basic to team teaching is an attempt to put together teachers with varying abilities in content knowledge and skills in order to capitalize on individual teaching strengths and to minimize weakness" (Davis, 1975, p. 6). The organizational patterns of the team, according to Davis (1975), need to "provide the teachers involved with an opportunity to learn from each other in a way that benefits both themselves and the students" (p. 6).

Despite numerous variations, Davis and Tompkins (1966) indicate that only two major types of teaching teams have evolved: synergetic and hierarchical. The synergetic team allows the instructional leadership within the team to rotate according to need rather than having a designated team leader or a master teacher provide the leadership for the team. Figure 1 represents an organizational pattern utilized in preparing newly-employed, non-professionally trained trade and industrial education teachers during a 20-day pre-service program of instruction in 1975 at The Ohio State University (Sage, 1976). This example illustrates that each teacher educator shared part of the responsibility for administering, implementing, and evaluating the preservice program of instruction, while the teacher educator who served as workshop director served as an interface between the team and the project director and the chairman of the faculty.

The hierarchical team is likened to a pyramid because the team leader is at the apex rather than at a level equal to the other teachers. The team leader, typically a master teacher, provides leadership for the other master teachers and their respective teams or other teachers, aides, resource personnel, et cetera. Davis and Tompkins (1966) indicate that the "major purpose of the hierarchy is to provide teachers with a means for professional advancement without having to leave the classroom." Figure 2 represents an organizational pattern created in 1977 to prepare the newly-employed, non-professionally trained trade and industrial education teachers for entry into their classrooms (Sage, 1979).

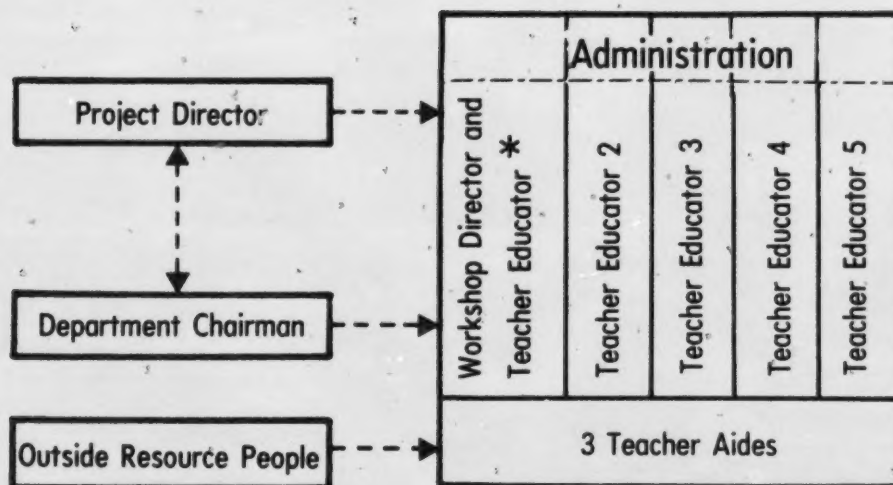
Regardless of the organizational pattern selected, "... team leadership is necessary to ensure proper functioning and role fulfillment by individual team members, as well as to establish and retain appropriate communication lines between the team, the administration and the public" (Johnson and Hunt, 1968, p. 3). The administrators must take an active leadership role in implementing the team teaching concept because without flexibility and adaptability on everyone's part a vital quality of the teaching team is lost.

The organizational processes utilized in either organizational pattern include planning through evaluation. The basic elements within each process are no different from those used in organizing any instructional system, but they may be more complex. Lobb (1964) indicates that it is most helpful if all members of the team can be scheduled the same preparation period (p. 24). Furthermore, "in organization, the complement to planning is preparation" (Lobb, 1964, p. 24).

It is extremely important that the organizational process include: (1) using timelines; (2) analyzing student needs and interests; (3) promoting student interests during the development of the curriculum; (4) tying the learning activities together so that they complement each other; and (5) ordering all

Figure 1 - Synergetic organizational pattern

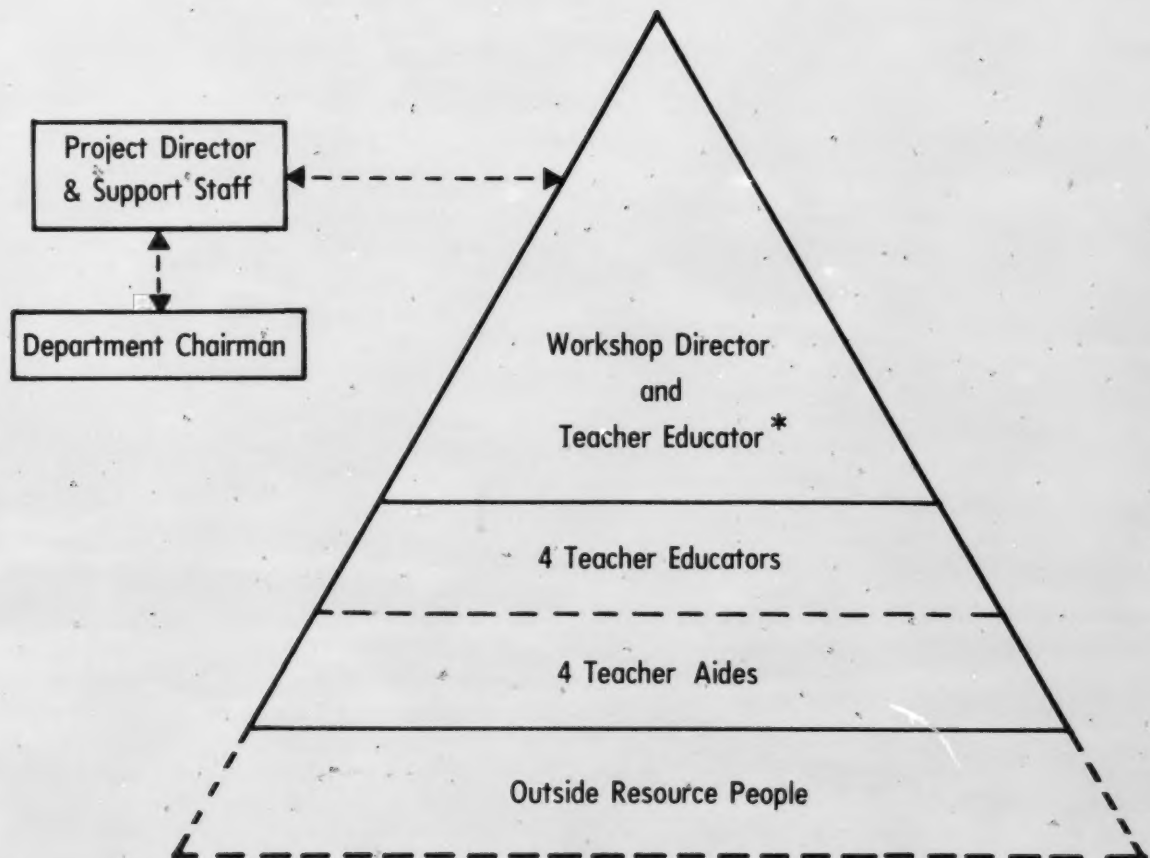
Organizational Structure of the Teacher Educators for the 1975 Preservice Program of Instruction



* The teacher educators were present at all sessions and the teacher aides were present when not in another academic class.

Figure 2 - Hierarchical organizational pattern

Organizational Structure of the Teacher Educators for the 1977 & 1978 Preservice Programs of Instruction



* The teacher educator and his respective teacher aide were present at each session. Each teacher aide received 8 credit hours of field experience and was required to attend each session.

materials, e.g., textbooks, tests, supplies well in advance of the time in which they are needed (Lobb, 1964). When properly organized, team teaching can serve students of all ability levels and can meet individual differences much better than the old traditional plan of organization [One teacher in each classroom of students] (Polos, 1965).

Team Members

The organization within teams will vary from one program to the next, but all teams appear to utilize a unique combination of educational personnel. Each individual has a specific role to play within the team and each should be selected on ability to work with others and because the skills and knowledges complement those held by the other team members.

The Administrator. Leadership problems in team teaching... are much more complex than those found in conventionally organized... [classrooms] (Blair and Woodward, 1964, p. 66). The chief executive officer of the program must be certain that he has leaders on his administrative team (Polos, 1965). Polos (1965) also indicates that "as the educational leader of the school of [the chief executive officer] should foster the type of climate that will encourage his staff to experiment, and put into practice a program that will be beneficial to the students" (p. 62). Such a leader "is accorded a position of enhanced prestige and responsibility" (Anderson, 1964, p. 197).

Team Leader. The team leader is at the apex of the team hierarchy and is an experienced, mature, master teacher with the ability and willingness to assume major responsibilities for administering, coordinating, and supervising the work and activities of teachers, pupils, and aides of his team (Blair and Woodward, 1964, pp. 68-69). Anderson (1964) adds that the team leader "has had training in supervision and human relations or educational sociology... (p. 164). Anderson (1964) also explains that during the first five years of the Franklin School Project "persons are more likely to succeed in the leader role if they possess these skills and qualities: (1) ability to initiate structure in the situation...; (2) the quality of being considerate of others...; (3) extraordinary knowledge of the learning process and educational goals; (4) artful talent in applying this knowledge and in selecting appropriate leadership behaviors for specific situations" (p. 196).

The above qualities are essential if the team leader is to perform these major tasks: (1) has all the duties of a teacher but teaches only two-thirds of the time; (2) assists the team by interpreting administrative decisions and plans to the other team members; (3) provides leadership to the team during the planning, teaching, and evaluation cycles; (4) initiates and coordinates teacher and student schedules within the team; (5) serves as a supervisor in his area of specialization; (6) supervises the various instructional practices of the team members; (7) helps to plan and evaluate student progress so as to improve the rate of learning; (8) makes recommendations to the administration; (9) coordinates all curriculum revisions of the team; and (10) plans and helps with in-service staff development activities of the team (Blair and Woodward, 1964).

Master Teacher. The master teacher is a certified teacher with an area of specialization and sufficient experience to develop excellent presentation skills

(Blair and Woodward, 1964; Lobb, 1964; Anderson, 1964). Blair and Woodward (1964) indicate that the master teacher may serve as the leader of his sub-group of teachers and assist team members in the development of their curriculum materials, units of instruction, lesson plans, et cetera. The master teacher also plays a major role "in working out purposes, procedures, and methodology for other teachers, as large groups are broken down into smaller groups" (Blair and Woodward, 1964, p. 71).

Teacher. This particular category of the teaching team can include two different types of personnel: qualified, competent and experienced teachers, and qualified and competent teachers who have little or no experience (Anderson, 1964; Blair and Woodward, 1964; Lobb, 1964; Johnson and Hunt, 1968). The literature also suggests that the teacher should be capable of working with others and able to accept a newer educational concept of himself as a manager of learning.

The typical tasks performed by the teachers, according to Blair and Woodward (1964), involve: (1) teaching their area of specialization to various size groups of students with varying individual needs; (2) sharing in the cooperative planning and evaluation of lessons; (3) studying the unique needs of the students to aid the team in planning the optimum learning activities for each individual; and (4) cooperating with other team members in the planning, teaching, and evaluation cycles of the program.

The Aide. Blair and Woodward (1964) quote Ellis Hagston as saying that "there is a combination of various activities many of which do not require professional competency and which take from 21 to 69 per cent of the total school day of a teacher" (p. 76). This level within the team can be filled by a wide range of individuals such as interns, paraprofessionals, or auxiliary personnel.

According to Anderson (1964) and Lobb (1964), an aide or auxiliary personnel is a mature person who enjoys direct contact with students. These individuals typically are not certified teachers and they frequently assist the teachers by grading papers, taking attendance, supervising activities, et cetera. In some instances the teachers' aide may be a fully certified practitioner, brought into the team at a level just under that of the teacher. Such aides tend to bring the 'real world' into the classroom (Miller and Sage, 1975; Sage, 1976; Sage, 1979; Sage, 1980).

Most frequently the role of the intern is filled by a student teacher (Lobb, 1964), a teacher, or an administrator in-training. In some cases an intern will be a fully trained professional, competent in a given area of specialization, but lacking the necessary background to become a certified teacher. Such an individual fulfills the role of a paraprofessional.

Resource Personnel. Individuals who assist the team or a teacher within the team during a particular unit of instruction or lesson are referred to as a 'resource' (Lobb, 1964; Johnson and Hunt, 1969; Polos, 1965). The problem is that there is no magic to the phrase ... 'resources' unless the community in reality possesses these resources. Many educators automatically assume these ...

talents exist, which is often not the case (Polos, 1965, p. 38). But, Johnson and Hunt (1968) remind us that the ineffective utilization of resources (human, material, or financial) decreases the efficiency of the team.

Pros and Cons

When a team is properly organized, implemented, and fostered by sound administrative leadership several advantages can be identified. According to Polos (1965), "most teachers are convinced that team teaching aids learning and that it is the highway of the future" (p. 84). The 1,200 teachers surveyed by Rutherford (1979) prefer this method of organization over the traditional method. Chamberlin (1969) states that "the main strength of the team approach seems to be in its flexible as well as controlled use of physical facilities and teacher talents" (p. 7). He continues by pointing out that team teaching does demand that all cooperating teachers have common objectives which pool their creative ideas, knowledge, and talents. Such activity stimulates other teaching teams and the upward spiral commences.

Advantages of team teaching according to Clarke (1977) are: (1) it involves teachers in the systematic decision-making process; (2) it precludes the need for a power struggle over who will make the decisions; (3) it builds a closer kind of cooperation between teachers and their administrators; and (4) it makes innovative ideas less dependent on a change agent.

Lobb's (1964) list of advantages is much more extensive than the others. His list identifies 20 qualities, which are: (1) more preparation time for teachers; (2) a greater variety in the use of methods and materials; (3) more detailed and careful lesson planning; (4) greater use of audio visual materials and equipment; (5) utilizing the talents of each team member; (6) a more professional use of instructional time; (7) better record keeping; (8) a more creative style of teaching; (9) better able to address educational problems; (10) better utilization of substitute teachers; (11) greater opportunity for in-service staff development activities; (12) a higher esprit de corps; (13) better utilization of instructional space; (14) more extensive evaluations of the program and teaching; (15) better able to keep abreast with new developments; (16) more effective supervision of students; (17) less anxiety over students with different learning abilities; (18) better evaluation of students with more impartial grades; (19) improved classroom discipline; and (20) increased intellectual stimulation.

Rutherford's (1979) research stresses that "You can teach in areas where you have the greatest strength and interest. More minds result in more and better teaching ideas and materials. Personality conflicts between students and teachers can be minimized. You can develop a greater variety and enriched quality of instructional options. When you are absent or not feeling well, team members can take over and the instructional program continues without interruption" (p. 30).

As with any major movement that departs from tradition, disadvantages can be identified. These disadvantages, the results of poor team teaching, are not weaknesses but actual obstacles in the road toward improving instruction (Polos, 1965). Polos (1965) continues by identifying these obstacles: (1) the lack

of proper facilities; (2) the myth of expandability; (3) ineffective team utilization, organization, and support; (4) inappropriate team selection procedures; and (5) lack of curriculum supervision.

According to Chamberlin (1969), "high on the list of difficulties inherent in team teaching is the problem of the human equation. It seems that some teachers find it difficult to work cooperatively and on a professional level with their peers" (p. 9). Lobb (1964) indicates that regardless of the organizational pattern selected some teachers may become reluctant to participate "due to fear of peer scrutiny. For the first time in the teacher's professional career, someone will be close enough to ascertain the quality of . . . [their] work" (p. 11). The teachers also feel additional pressure because "the stress is on working with, not for, colleagues" (Davis and Tompkins, 1966, p. 14). Another obstacle [to team teaching] is a setup where there is lack of aggressive leadership on the part of the administrators. Too often . . . [administrators] assume the role of benevolent directors, allowing eager teachers to try out team teaching but refusing to assume responsibility (Lobb, 1964, pp. 11-12).

Lobb (1964) also lists these concerns regarding team teaching: (1) confusion caused by the increased demand for instructional coordination; (2) inappropriate facilities; (3) the necessity to learn the characteristics of individual students; (4) overuse of large groups and lectures; (5) difficulty in modifying instructional strategies to fit the mood of the students; and (6) the wide range of responsibility demonstrated by the students.

Rutherford's (1979) research indicates that most of the team teachers were concerned about time because the cooperative effort in addition to the increased involvement of the students requires more time. Some of the teachers regretted the loss of the interpersonal relationships between them and their students in the traditional classroom. Another concern identified by the teachers was the difficulty in resolving the interpersonal conflicts which occur between team members. Rutherford (1979) also pointed out that there was not a common approach to teaming within the organizational patterns of the teams studied.

"Despite their concerns, teachers support and are enthusiastic about team teaching and its effectiveness for them and their students. Teachers have been able to adapt the concept to meet their individual needs, a flexibility that, perhaps, is a major reason why team teaching continues its quiet growth" (Rutherford, 1979, p. 30).

Collegiate Teaming

Team teaching has been widely used in the elementary and secondary schools of our nation, but it has not been widely utilized in higher education. Today, with decreasing student enrollments, shortages of good teachers, and the decreased purchasing power of the dollar, higher education as well as the elementary and secondary systems will continue to refine their organizational patterns through a teaming approach.

Many experiments were conducted in higher education during the mid and late fifties as a result of funds received from the Ford Foundation and the Fund

for the Advancement of Education. Such experiments were conducted at Austin College, Sherman, Texas; The Monteith College of Wayne State University, Detroit, Michigan; Hofstra College, Hempstead, New York; Goddard College, Plainfield, Vermont; Antioch College, Yellow Springs, Ohio; to mention a few. These colleges represent institutions where team teaching was utilized in their general education courses, such as: natural science, history, religion, political science, psychology, mathematics, chemistry, biology, and geology (Polos, 1965; La Fauci and Richter, 1970; Ford Foundation, 1966).

Team teaching has been used to achieve a wide variety of goals and objectives in addition to very specialized programs and with a broad range of students. Teaming was used in the teaching of rigorously screened, superior students at the Junior College of Boward County, Florida, selected marginal students at Boston University College, and of limited ability students at Mercer County Community College, New Jersey. Delta College in Michigan used teaming to teach diverse subjects in nursing, while at Hofstra College in New York statistics were taught. El Camino College taught cosmetology by teaming as did the University of Kentucky train their dentists and New York State University - Albany, the Ohio State University, and Emory University prepare future teachers for the classroom (La Fauci and Richter, 1970; Green, 1962; Lanquis, Stull, and Kerber, 1969; Miller and Sage, 1975).

The review of literature suggests that research on team teaching at the collegiate level is still in the exploratory stages of development. The lack of research studies and articles on team teaching in real estate education suggests that this pattern of instructional organization is in the investigative stages of development. Only a few studies reporting validation findings on teaming were located, while virtually no studies were found at the collegiate level that reported findings on design, implementation, evaluation, and revision of the organizational pattern of the teaming approach.

Johnson and Goeffray (1970) reported their findings on the utilization of team teaching a college level course in individual psychological measurements. Their subjective appraisal of team teaching identified problems centering around sharing class leadership, maintaining consistent grading procedures, and the teachers' ability to recognize behavioral changes during the large group lectures. They also concluded that teaming stands or fails on the pre-planning for expected competencies and the need for continuous, open communications between all participants.

The studies conducted by Urban (1971), Frazier (1975), and Arcidiacono (1970) utilized students in college level mathematics for their investigations of team teaching. Urban's (1971) and Frazier's (1975) studies found significant differences in achievement scores and in their attitudes towards mathematics for students in the sections organized under a team teaching approach as compared to the students taught under a traditional approach. Urban (1971) also found a significant difference in the scores representing the students' attitudes toward their learning experience. The difference favored those students who experienced the team teaching approach as compared to those students who experienced a conventional approach or a large-group lecture approach. Frazier (1975) also found no significant difference in the failure rates between the

students who experienced team teaching, individualized instruction, and the traditional method of instruction. Arcidiacono's (1970) study found no significant differences between the scores of the students on achievement, their attitude towards mathematics, and their attitude towards algebra.

Hoffman (1975) compared a team teaching approach with the traditional method of presentation in a junior college medical-surgical nursing course. The students who participated in the team teaching approach had significantly higher scores on the National League of Nursing tests when compared to the students in the other group. Hoffman (1975) also indicated that more of the students in the team teaching section passed their tests as compared to the other students.

Educators should not be satisfied to learn that team teaching accomplishes a given outcome as well as a traditional approach, or even it accomplishes that outcome somewhat better (Heathers, 1964, p. 317). If team teaching is to have a place in higher education programs designed for educational excellence, then more research is needed in the comparison of approaches, instructional methods, evaluation, and implementation features of this organizational approach.

APPLICATIONS OF TEAM TEACHING TO REAL ESTATE EDUCATION

Events of Instruction

There are certain events which occur in the process of instruction. These events contribute to the process of learning. It is not necessary that all the events occur in every instructional unit, nor that they necessarily always be performed by instructors. Some may be done by students and even determined by them. Over time, however, all the events should take place in order to support the processes of learning. The purpose of this section of the monograph is to explain the events of instruction and illustrate how they might be accomplished in team teaching situations. The chief sources for this discussion are Gagne (1977), Gagne and Briggs (1979), and Gage (1976).

Gagne defines instruction as "a set of events external to the learner which are designed to support the internal processes of learning" (1977, p. 155). It seems necessary to make two observations before considering the events and their implications for team teaching. First, these events presuppose that certain other decisions have occurred first. Namely, that the outcomes of instruction have been decided upon, performance objectives have been defined, and there is a sequence for the topics and lessons which make up the course already established. When two or more people are teaming to provide instruction then these decisions require collaboration and dialogue. They cannot be made unilaterally. Above all, agreement on outcomes, performance objectives, and sequence of topics and lessons should not be presumed. Second, in some instances, the events occur "naturally" as a result of the learners' interaction with the content of the lesson, with the instructor(s), and with other learners. For example, feedback to the learner may naturally and easily be part of the group's function. Mostly, however, the events of instruction must be deliberately

arranged. They will be considered below in the order in which they appear in Gagne and Briggs (1979).

1. Gaining attention

This is usually less of a problem when learners are adults than when they are children. Adults commonly possess a seriousness of purpose about education. For instance, an evening class may have been anticipated off and on all through the working day. Sometimes however, while not lacking serious intent, adult learners may be preoccupied with pressures of work, illness or disharmony in the family, fear of failure, or perhaps simply fatigue. Gaining attention often requires insightful knowledge of the students. Two or more instructors may want to use each other's experience regarding the lesson's content to gain attention. For instance, "My colleague says he has two kinds of problems in selling a home. I'll let him explain." The teaching partner then elaborates on the fear alluded to in the opening communication. It is best to have some alternatives in mind for gaining attention.

2. Informing the learners of the objective

Sometimes the aim of the lesson is quite obvious, and need not be specially communicated. It is dangerous to presume this, however. More often than not it is possible for learners to have grasped one objective but not all, or a portion of one but not the complete idea. Communicating the objective takes little time and prevents the students from getting off the track and helps the instructional team to stay on target. The specializations of the team members may be used to underscore distinct dimensions of an objective. For instance, let us say there is an economic, a legal, and a salesmanship component to what learners are expected to know and perform as a result of a particular lesson (the objective). Members of the team identified as specialists in those areas might each explain the objective with particular emphasis on what the learners must do to explain or demonstrate the legal, economic, and salesmanship bases of their decision or course of action.

An overarching objective of all real estate education is that learners acquire the ability and desire to learn independently so as to maintain competence throughout their careers. This skill can be enhanced by encouraging learners to freely identify new learning objectives in addition to those posed by the instructional team. This identifying of related issues and similar questions stimulates learners to see that their education is a continuous function to be carried on throughout life.

3. Stimulating recall of prerequisite learned capabilities

Much, if not all, learning is the combining of ideas. Think of the separate judgments to be made and information to be considered in making a property appraisal. Previously learned rules and facts must be stimulated and recalled before being combined with new learning, and result in new capabilities. Those previously learned concepts, rules, facts, and skills might be divided among team members for the purpose of review. Or a single instructor might be responsible for the review. Then others on the instructional team would build upon this

foundation. Many variations of responsibility are possible and can potentially enrich the learning process. Care must be taken, however, to avoid confusing or misleading learners with too much unrelated information. Teachers probably err more often on the side of talking too much and overloading students with information. Team members can help each other avoid this tendency.

4. Presenting the material to be learned

Two observations about this event, the heart of teacher behavior, seem in order. First, teachers, alone or in a team, will gravitate to what they know best and do best. Every instructor tends to stress the material with which he feels most at ease. For example in an elementary school setting some teachers may prefer science to social studies. When they are working as a team these teacher strengths can be accommodated. The problems, principles, and skills to be learned in the real estate profession seldom neatly confine themselves to one discipline. They are seldom, for instance, simply problems, principles, or skills drawn from the discipline of law or marketing or economics. Rather they are often drawn from a combination of these or other related disciplines. No one instructor can be equally proficient in all these areas. The implications for teaming are obvious. Yet the advantage of a team comprised of specialists will be negated if time is not allocated for planning and dialogue. Assembling competent musicians does not make an orchestra.

The second observation is that the material to be presented must be consistent with the objectives. For example, if a student is to learn to respond to oral questions in French, then these oral questions must be presented. It does little good, however, to present them in English. If the objective is for a student to tune an engine, it does little good to have him write an essay on the subject. Instruction, whether by a single individual or a team, must focus on accomplishment of the objectives for a specific lesson.

5. Providing learning guidance

The purpose of instructional guidance is to stimulate a direction of thought which leads the student to the new learning. Often this consists in helping the learner combine relevant concepts and "discover" the answers. The amount of questioning and hinting varies with the learners and the subject matter. None of this is necessary when the objective is to master a straightforward set of facts or rules. When attitudes or standards of professional conduct are the issue, a good deal of questioning, interpreting, and "guiding" may be necessary. Guidance from experts seems especially appropriate when several courses of action are legitimate and discernment of what is best or most appropriate is not obvious or even agreed upon. Through planning and prior consultation, a team of instructors might set out to deliberately pose alternative points of view and their merits.

6. Eliciting performance

This event is a communication that in effect says "show me" or "do it." For example, an instructor alone or in a team might ask a learner to apply a rule or concept to a specific situation; to paraphrase all the relevant information available regarding a specific problem; to indicate choices of ethical action open

to him in real or simulated situations; to actually perform a specific function or action. Instructors can multiply their efforts by dividing learners into smaller groups for purposes of eliciting and observing performance.

7. Providing feedback

There is no standard way of phrasing or providing feedback. Sometimes feedback is available by consulting another part of a book for the correct answers. Sometimes it is given through a nod or smile from the instructor. Students universally require information about the correctness or degree of correctness of their performance. The need does not lessen with age. In fact, adult learners may be easily intimidated and often insecure about the adequacy of their performance. A team of instructors can provide feedback on separate aspects of a student's learning and can probably observe more and enrich the feedback provided.

8. Assessing performance

This event has to do with instructors determining if student performance is adequate. Has it been observed often enough to be based on real learning or chance behavior? Were the conditions varied enough to confidently say that the newly acquired knowledge, skill, or attitude is firmly entrenched no matter what interference is present? These judgments are made over time. They rely on repeated observations and nearly intimate knowledge of student performance.

9. Enhancing retention and transfer

The context in which the material has been learned is all important when it must be recalled. Newly learned material is embedded in a network of relationships. These relationships provide cues to its retrieval. Frequent reviews spaced over periods of time enhance retention.

Transfer of learning occurs when it can be applied to new tasks under new circumstances. A team of instructors can bring imagination to constructing such practice situations as well as opportunities for learners to demonstrate this transfer capacity. There exists a myriad of problem situations from the world of real estate practice. Experience with such situations may be richer for some team members than others. Opportunities to experience variety and novelty in problem-solving tasks can be a consequence of such team strengths.

In summary, it can be said that the events of instruction allow for a great deal of flexibility. There is no standardized, routine, set of communications and actions by which they are accomplished. Taken together they all contribute to learning. Similarly, it is not necessary that the events be provided for by a team of instructors. One instructor can provide them, and indeed many of the events can be shared responsibly with mature learners. There would seem to be, however, two distinct advantages accruing to students in real estate education when courses are team taught. First, the practice of real estate draws its knowledge base from diverse disciplines. Those principles and their application can be effectively taught by a specialist in those disciplines in conjunction with real estate practitioners. Second, the real estate profession requires not only

retention but also application of knowledge to diverse problem situations. Case studies requiring those applications can be effectively designed and student performance evaluated by a team of teachers. These proposed advantages could be tested by research.

A PARADIGM

Introduction

The opportunities for teaming at the collegiate level can be numerous for the innovative administrator and the creative professor and practitioner. The concept has the potential of improving the utilization of staff, better addressing of the needs of the student, and a more efficient use of time, resources, and facilities. In addition, the curriculum could be more up-to-date, interesting, and challenging while providing a new and enriched motivation for the real estate education student. Thus, the concept should not be accepted or rejected without first looking at the total picture, such as the skills and competencies required of a real estate practitioner; budgets; department, school, and/or college philosophies; identification and selection of potential team members; facilities; resource library; identification and selection of competent real estate practitioners; and the success-failure rates of students on their licensing examinations and their tenure in the profession. As Johnson and Hunt (1988) said: "we must look into the future at the very moment we plan for the present, if we are to maintain our present effectiveness in serving the needs of ... [our profession] (p. 13).

A Structure

The writers propose that the administrators, faculties, practitioners, and students of real estate education, together, create a hierarchical structured teaching team to address the present and future needs of the real estate profession. This teaching team should be organized only after the administrator determines the level of interest from the faculty, local real estate practitioners, and real estate education students.

In order for this plan to function effectively, pre-planning is not only essential but very vital to the success of the team. The team must first determine its formal structure. If the real estate education program is small, the program should be organized around a single team with each professor/practitioner representing one or more academic areas (refer to Figure 3). On the other hand, if the real estate education program is large, the program could be organized around a series of small teams representing each academic area. The academic teams would then be coordinated by the team leader (refer to Figure 4).

Either schema would promote further administrative involvement in addition to promoting faculty, practitioner, and student involvement, cooperation and growth. Such a process would also foster the concepts of management by objectives, staff development, and career education.

Figure 3

SINGLE TEAM ORGANIZATIONAL PATTERN FOR A REAL ESTATE EDUCATION PROGRAM

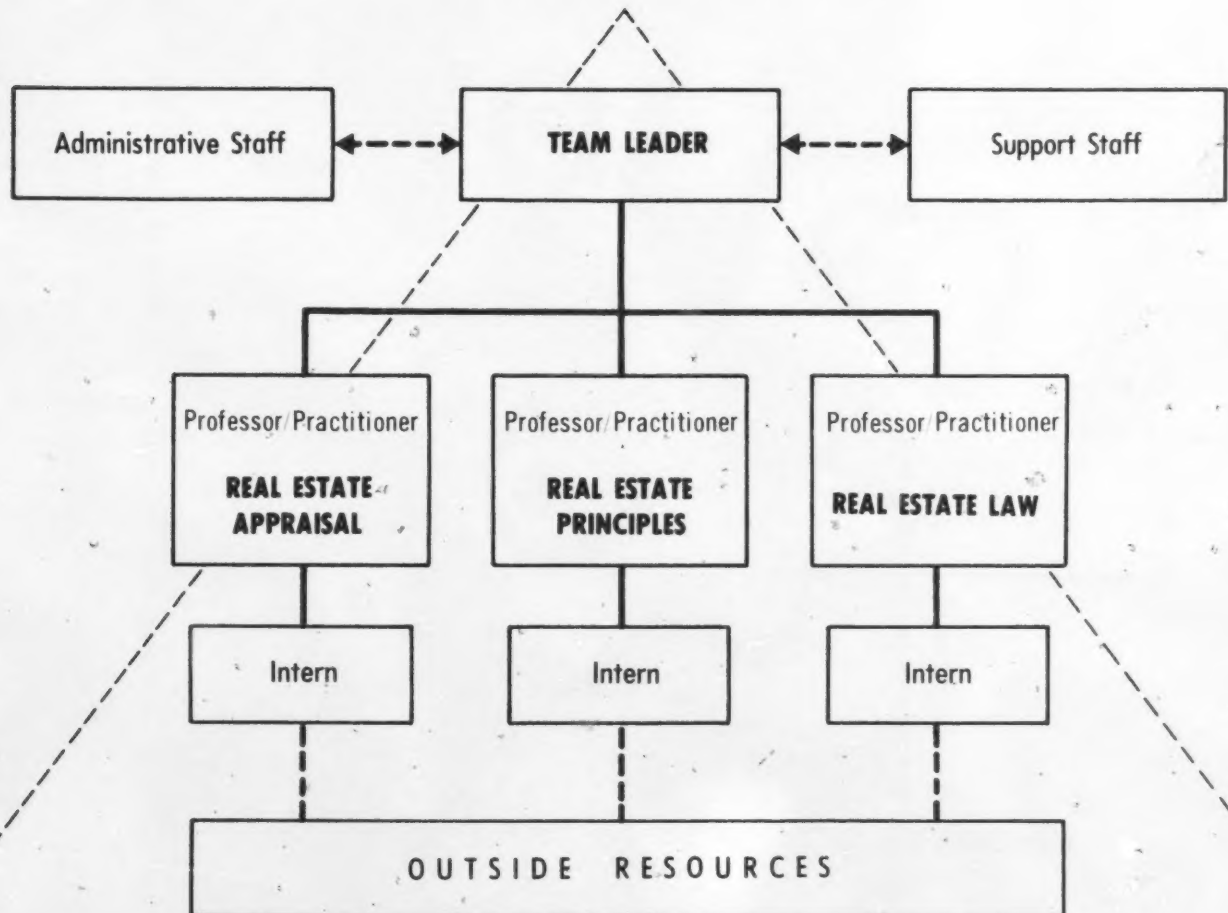
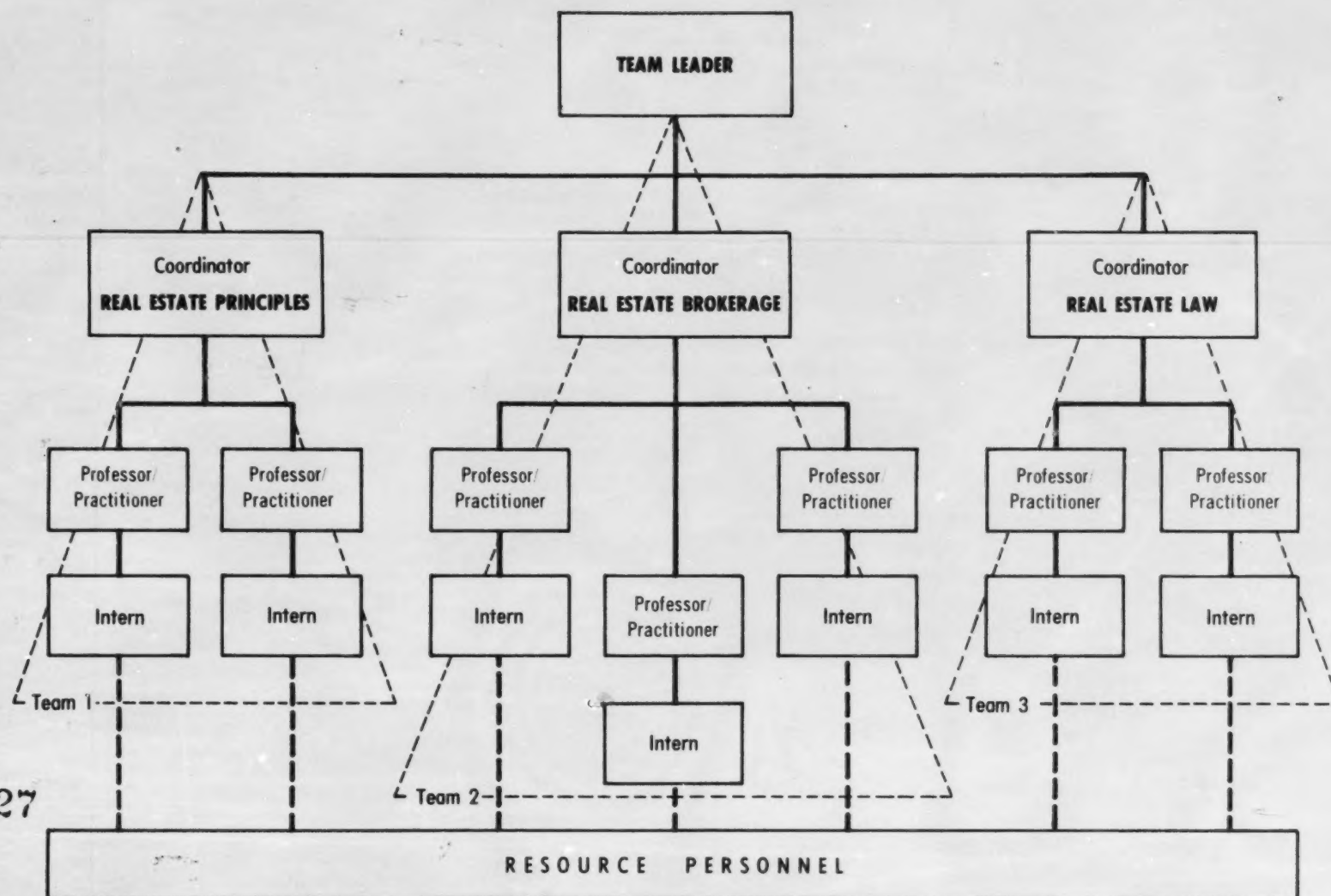


Figure 4

MULTIPLE TEAM ORGANIZATIONAL PATTERN FOR REAL ESTATE EDUCATION



The internal structure of the teaching team should be arranged around a balanced use of large group (30-plus students) sessions and small group (12 to 15 students) sessions. The large group session should not be so large that the lecture method is the only instructional strategy available to or used by the professor/practitioner. The small group functions best when the ratio of instructional staff to the number of students is one to five. Such a ratio promotes individual attention and fosters a higher level of student motivation.

The large group session would ideally lend itself to instructional strategies such as illustrated talks, panel discussions, simulations, and guest speakers. The small group session would more readily foster instructional strategies such as inquiry, problem-solving, gaming, role-playing, group discussions, and individualized instruction.

Either session could be supplemented with learning activities which promote independent study, research, and report writing. In addition, the real estate education student could be assigned individualized activities in the resource library or to a high technology instructional aid such as a micro-processor or other computer assisted/managed instructional programs. A goal of teaming is to obtain a blend of different instructional strategies and complementary learning activities to make the real estate education program interesting and motivating for the student, while encouraging the instructional staff to participate in staff development activities to upgrade themselves. The staff development activities should not be limited to areas of real estate but should also include curriculum development, instructional/educational technology, and instructional system development activities.

Team Membership

Selection of team members in either organizational pattern should be influenced by such factors as personality, academic rank, practical experience, leadership ability, and one's professional philosophy. These factors, in addition to many others, need to be identified and weighted according to their importance before any team member is selected.

Team leader. The personal dynamics of the team leader will influence the overall effectiveness of the team. A major role played by the team leader is that of assisting all team members in carrying out their team responsibilities, fulfilling their role expectations, and providing the necessary time and assistance to the junior faculty member so that they can be promoted and/or tenured. One-third of the team leader's academic load could represent release time for team administration, coordination, and related staff development activities. The team leader should be selected by the team members during their first or second organizational meeting.

Team coordinator. A team coordinator would be utilized only in the second model, Figure 4. The team coordinator directs the efforts of an academic area, administering the same type of activities as does the team leader for the total team. Each team coordinator also assists the team leader in the management of the organization and assists in the various staff development and curriculum development activities. The team coordinator should also be selected during the first or second organizational meeting of each academic team.

Professor/practitioner. The uniqueness of this paradigm is built on a balanced partnership between a professor in real estate education and a local real estate practitioner. In a few instances a real estate education program may find these qualities in a single individual. This uniqueness should foster the blending of the academic skills and knowledge of the real estate professor with the practical skills and knowledge of the 'real world' real estate practitioner. This powerful combination of talent has the potential of creating a learning environment which would be unduplicated anywhere.

The professor/practitioner should be selected on his ability to work with others, share ideas and responsibilities, stimulate the thinking of his students, and his mastery of different instructional strategies. His primary responsibility is to maintain the real estate education students as the focal point of his endeavors so as to maximize their opportunities for learning.

Intern. The intern is a real estate education student who has completed all of the academic requirements for real estate licensing, but who has not completed the requirements for a degree and/or who has not taken the real estate licensing examination. An intern can function very well as a member of the teaching team, but due to the lack of professional teaching and practical real estate experience close supervision is essential.

Resource personnel. Resource personnel represents any individuals who are not part of the formal teaching team, but who have talents, skills, and/or knowledge which can enrich a particular section of the real estate education program. Such personnel are more frequently utilized during the large group than during the small group sessions.

Curriculum

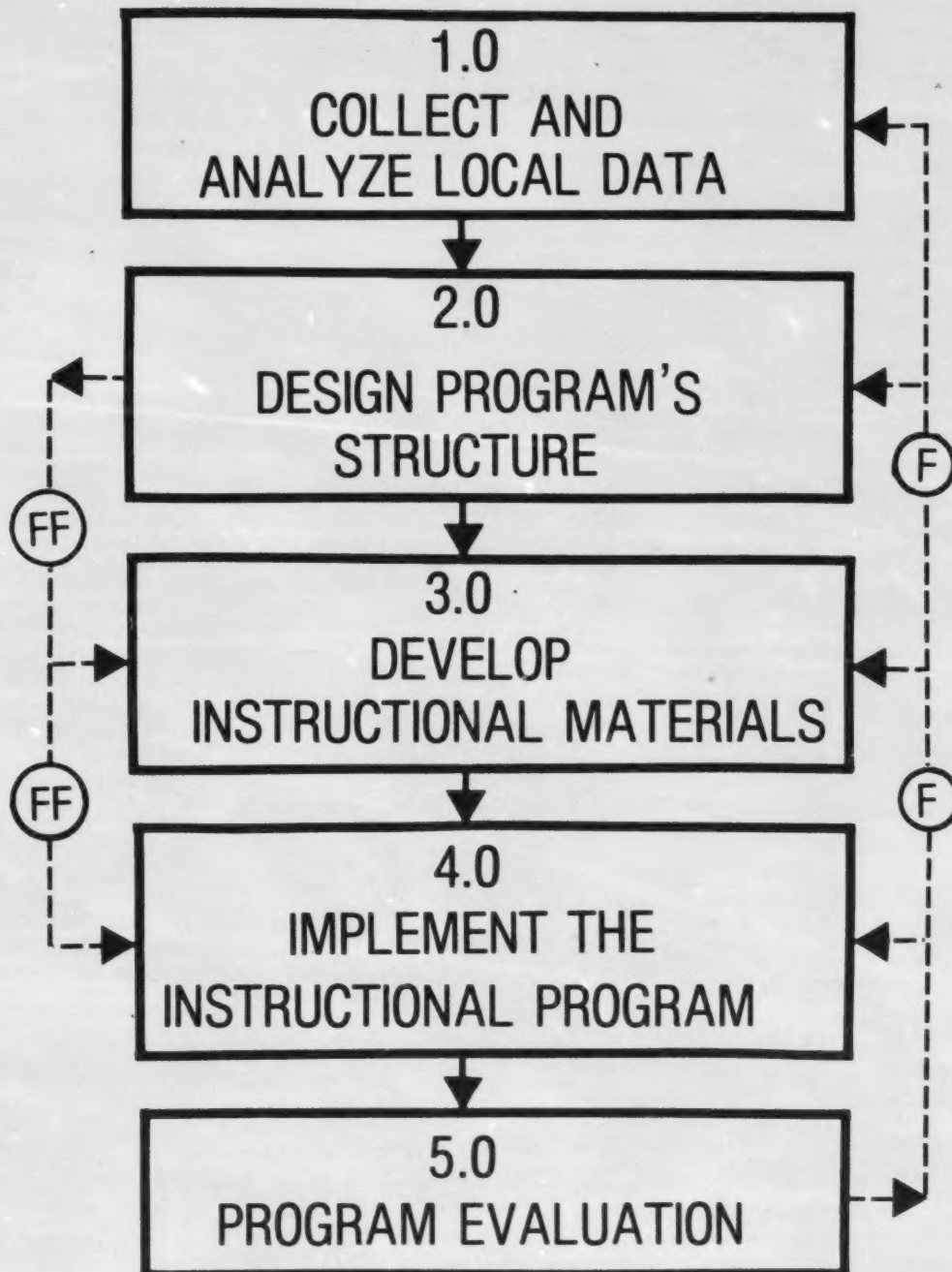
A real estate education program operates under a prescribed curriculum core as recommended by the Ohio Real Estate Commission. The uniqueness of the teaming concept and the proposed paradigm fosters this type of a curriculum format. Whether the curriculum cuts across departmental, school and/or college lines, agreements can be reached through the cooperative efforts of each team member and through open lines of communications between all participants.

Should a real estate education program desire to go all out and address the competencies of the real estate practitioner rather than the content of a given textbook or two, a systematic curriculum development process is encouraged. The systematic approach, Figure 5, not only considers the content but the implementation and evaluation processes, too. This approach will not only assist the team leader in monitoring student progress, but will also assist the team in the evaluation of instructional materials used, overall effectiveness and efficiency of the program, and individual team member ability.

Those real estate education programs which cannot muster the necessary budgets, time, or personnel to undertake such a project should rely on the instructor guides available at the Center for Real Estate Education and Research. The Center for Real Estate Education and Research should consider revising their instructor guides to foster the teaming concept as well as

Figure 5

DEVELOPMENT OF AN INSTRUCTIONAL SYSTEM



improving real estate education in general. The instructor guides must be more explicit with instructional alternatives built into them rather than being a very stale, rigid format. The following organization might be considered as a format for each topic with the lesson plan broken down to encourage large and small group activities:

Table 1

PROPOSED TOPICAL FORMAT FOR THE INSTRUCTOR'S GUIDE

-
-
- I. Notes to Professor-Practitioner
 - II. Assignments from Resource Library
 - III. Lesson Plan for Large Group Instruction
 - A. Titling Information
 - B. Identification for Instructional Aids/Equipment
 - C. Bibliography Used
 - D. Identification of Competencies/Objectives to be Taught
 - E. Introduction to the Lesson
 - F. Instructional Outline of Competencies/Objectives to be Presented
 - G. Introduction to Small Group Assignments
 - IV. Small Group Application Plan
 - A. Introduction of Activities
 - B. Review of Large Group Presentation
 - C. Learning Activities
-

Table 1 (Continued)

PROPOSED TOPICAL FORMAT FOR THE INSTRUCTOR'S GUIDE

V. Handout Material

A. Note-Taking Guides

B. Handout Materials

1. Articles
2. Forms
3. Supplementary Aids

VI. Evaluation Items

Each topic should present alternatives for the professor/practitioner to select from rather than rely primarily on the lecture method to present curricular information. A reliance on any one instructional method or strategy will almost certainly destroy the effectiveness and efficiency of a well-organized teaching team.

Implementation

The implementation of teaming cannot occur overnight, but only after very careful and purposeful planning. The planning should not be centered at the administrative level but also involve interested professor/practitioners and students.

The pre-planning activities of team teaching should address important topics such as: (1) selection of team members and team leaders/coordinators; (2) compensation/release time for team leaders/coordinators; (3) availability of the scheduling of conference rooms, classrooms, and lecture halls; (4) teacher-student ratio for determining the need for interns; (5) compensation for interns; (6) scheduling difficulties of students and conflicts with other courses within the department; (7) type and quantity of in-service staff development activities required by the team members; (8) student selection and structuring of small group sessions; (9) availability of a real estate education resource library; (10) availability and scheduling of various instructional aids, materials, and equipment; (11) provision for professor/practitioner preparation time; (12) identification of the initial costs to implement and the costs to maintain a teaching team; (13) meeting the needs of the professor/practitioner who is seeking promotion/tenure; and (14) the availability and access to automation and data processing equipment.

The Role of Continuing Education

Many real estate courses are offered through the continuing education divisions of community colleges and small private colleges. The benefits accruing to the college through paid tuition are obvious. Potential benefits when instruction is organized around a team structure may not be as obvious to harried administrators of continuing education preoccupied with the profit margin of their courses. Instruction provided by a real estate practitioner and professors whose disciplines are related to real estate creates a healthy exchange for teachers and students. Professors are forced to test the utility of their disciplines in real world situations. Students are exposed to college professors and become knowledgeable of the disciplines they represent and the advantages of further college education. This can result in more adults entering college to earn bachelor's degrees.

Real estate educators have a right to expect that continuing education administrators will work for the best interests of real estate programs. Such administrators have an obligation to protect the quality of the program. They have a role to play in negotiating with department chairpersons to obtain competent professors. They should assist real estate educators in assessing the performance of practitioners and professors. In addition, such administrators should make every effort to make the college's instructional resources available to the program. Audio-visual equipment, learning laboratories, libraries, and student advisement services should all be open to real estate students. Keeping options open for a variety of learners and a variety of instructional delivery systems is an important part of the continuing education administrator role. Real estate educators may need to lobby actively in order to secure maximum services.

Food for Thought

Today there is a critical need for educators to redefine their professional roles, redefine the teaching-learning process, and challenge the student so as to maximize learning. Teaming is only one organizational pattern available to the educator, but very little is really known about it at the collegiate level. For those real estate education programs willing to make a commitment to team teaching, here are some questions which you can assist real estate education and higher education in answering: (1) What are the advantages and disadvantages of your organizational pattern? (2) How does teaming really affect the use of different instructional methods or strategies? (3) What benefits did the students, team members and the department, school and/or college receive as a result of real estate education employing a team teaching approach? (4) How did you handle professor/practitioner relationships in a department only partially committed to team teaching? (5) How did you prepare team members for team teaching? (6) How can team teaching help in the professional training of future real estate practitioners?

These are only a few important questions raised by team teaching. You will also raise questions which will deserve attention as you become involved with the concept. These questions could be addressed by and disseminated to the real estate profession and higher education as junior faculty members work towards their promotion and tenure.

REFERENCE LIST

Books

- Anderson, R. H. The Organization and Administration of Team Teaching. In J. T. Shaplin & H. F. Olds, Jr. (Eds.), Team Teaching. New York: Harper & Row, Publishers, 1964.
- Blair, M. & Woodward, R. G. Team Teaching in Action. Boston: Houghton, Mifflin Company, 1964.
- Chamberlin, L. J. Team Teaching Organization and Administration. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969.
- Clarke, R. Innovative Faculty Team Programs: An Administrator's Handbook. West Nyack, NY: Parker Publishing Company, 1977.
- Davis, H. S. & Tompkins, E. How to Organize Effective Team Teaching Programs. Englewood Cliffs, NJ: Prentice Hall, Inc., 1966.
- Davis, J. E. Team Teaching: What Research Says to the Teacher. Washington, DC: National Education Association, 1975.
- Gage, N. L. (Ed.) The Psychology of Teaching Methods. 75th Yearbook of the National Society for the Study of Education. Part I, v. 75, Chicago, 1976.
- Gagne, R. M. The Conditions of Learning. 3rd Ed. New York: Holt, Rinehart and Winston, 1977.
- Gagne, R. M. & Briggs, L. J. Principles of Instruction. 2nd Ed. New York: Holt, Rinehart and Winston, 1979.
- Heathers, G. Research on Team Teaching. In J. T. Shaplin & H. F. Olds, Jr. (Eds.) Team Teaching. New York: Harper & Row, Publishers, 1964.
- Johnson, R. H., Jr. & Hunt, J. J. Rx for Team Teaching. Minneapolis: Burgess Publishing Company, 1968.
- Joyce, B. & Weil, M. Models of Teaching. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.
- La Fauci, H. M. & Richter, P. E. Team Teaching at the College Level. New York: Pergamon Press, 1970.
- Lobb, M. D. Practical Aspects of Team Teaching. San Francisco: Fearon Publishers, 1964.
- Mosston, M. Teaching: From Command to Discovery. Belmont, California: Wadsworth Publishing Co., 1972.

Polos, N. C. The Dynamics of Team Teaching. Rubaque, Iowa: Wm. C. Brown Company Publishers, 1965.

Shaplin, J. T. Description and Definition of Team Teaching. In J. T. Shaplin & H. F. Olds, Jr. (Eds.) Team Teaching. New York: Harper & Row Publishers, 1964.

Team Teaching in Maine. New York: University of Maine, Ford Foundation, 1966.

Periodicals

Green, D. R. The Emory University Projects in Teacher Education. Journal of Teacher Education, 1962, 13, 127-129.

Johnson, J. C. & Goeffray, H. E. Subjective Appraisal of Team Teaching. Improving College and University Teaching, 1970, 18, 300-302.

Lanquis, M. L., Stall, L. L., & Kerber, J. E. Teaming: Innovation in Teacher Education. Educational Leadership, 1969, 26, 806-807.

Rutherford, W. L. Questions Teachers Ask About Team Teaching. Journal of Teacher Education, 1979, XXX (4), 29-30.

Williams, R. O. What Teaching Methods When? Theory into Practice. Vol. XIX, No. 2, Spring, 1930.

Miscellaneous Citations

Arcidiancono, M. J. A Comparison of the Effects of a Team Teaching Method, Involving Prospective Student Teachers, and Attitudes of College Intermediate Algebra Students. Unpublished doctoral dissertation, University of Oregon, 1970.

Frazier, F. L. A Problem of the Effects of Teaching Mathematics Via Individualized Instruction, Team Teaching and the Traditional Method to College Freshman Liberal Arts Majors. Unpublished doctoral dissertation, University of Houston, 1975.

Hoffman, E. A Comparison of Team Teaching and Audio-Taped Lectures with the Traditional Lecture Method. Unpublished doctoral dissertation, Nova University, 1975.

Miller, A. J. & Sage, J. E. From Industry into Education. Paper presented at the annual meeting of the American Vocational Association, Anaheim, CA, December 1975.

Racster, R. L. (Ed.) Principles and Practice II. The Ohio Real Estate Commission, 1980.

Sage, J. E. Identification of Trends Indicative of a Successful Vocational Teacher. Paper presented at the annual meeting of the National Society for Performance and Instruction, Washington, DC, April 1979.

Sage, J. E. From Industry into Education. A paper presented at an employment, personnel and trainer program, Marion, OH, March 1976.

Sage, J. E. Updating a Teacher Education Program: A Process of Evolution. A paper presented at the National T & I Conference, Wichita, KA, October 1980.

Urban, J. D., Jr. The Design and Evaluation of an Undergraduate Mathematics Course Incorporating Team Teaching, Individualized Instruction and Team Supervision. Unpublished doctoral dissertation, University of Pittsburgh, 1971.

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PUBLICATIONS

- No. 1 "The Selection of Personnel Selection Systems in Real Estate," by Dr. Richard Klimoski and Mr. Paul Sackett, 1978. 39 pp. (\$1.50)
- No. 2 "A Longlinear Probability Model of Neighborhood Choice: A Case Study of Cleveland," by Dr. David Segal, 1979. 66 pp. (\$1.50)
- No. 3 "Community Attitudes and Perceptions of Selected Manufacturers in Ohio," by Dr. Henry L. Hunker, 1979. 70 pp. (\$1.50)
- No. 4 "Ohio Condominium Law Reform: A Comparative Critique," by Prof. John Blackburn and Prof. Nancy J. Melia, 1979. 82 pp. (\$1.50)
- No. 5 "Real Property Taxation in Ohio," by Dr. Robert Carbone and Dr. Ronald L. Raester, 1979. 26 pp. (\$1.50)
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